PROPOSED 2013 RULE CHANGES

SURFACE MINING (NON COAL) CHAPTER 43-02-02.3

<u>43-02-02.3-01.</u> <u>Definitions.</u> The terms used throughout this chapter have the same meaning as in North Dakota Century Code chapter 38-12, except:

- 1. "Adjacent area" means land located outside permit area where air, surface or ground water, fish, wildlife, vegetation, or other resources may be adversely impacted by surface mining and reclamation operations.
- 2. "Certified or registered mail" means any form of service by the United States postal service, federal express, Pitney Bowes, and any other commercial, nationwide delivery service that provides the mailer with a document showing the date of delivery or refusal to accept delivery.
- 3. "Coal" means a dark-colored compact and earthy organic rock with less than forty percent inorganic components, based on dry material, formed by the accumulation and decomposition of plant material. The term includes consolidated lignite coal, in both oxidized and nonoxidized forms, having less than eight thousand three hundred British thermal units per pound [453.59 grams], moist and mineral matter free, whether or not the material is enriched in a radioactive materials
- 4. "Department" means the department of mineral resources of the industrial commission.
- 5. "Deposit" means an underground concentration containing a common accumulation of subsurface minerals.
- 6. "Director" means the director of the department of mineral resources of the industrial commission.
- 7. "Disturbed area" means the surface area disturbed by mining and reclamation operations. Areas are classified as "disturbed" until reclamation is complete and the performance bond or other assurance of performance required by North Dakota Century Code chapter 38-12 and this article is released.
- 8. "Diversion" means a channel, embankment, or other man-made structure constructed to divert water from one area to another.
- 9. "Geomembrane" means a synthetic, impermeable membrane used in contact with soil or other materials in geotechnical and civil engineering applications to contain liquids.

- 10. "Impoundment" means a closed basin, naturally formed or artificially built, which is dammed or excavated for the retention of water, sediment, or waste.
- 11. "Large Mining Operations" means mining operations which have a disturbed area of more than ten acres at any time.
- 12. "Operator" means any person or persons who, duly authorized, is in charge of the development of a lease or the operation of a producing property.
- 13. "Post-mining land use" means a beneficial use or multiple uses which will be established on a permit area after completion of a mining project.
- 14. "Small mining operations" means mining operations which have a disturbed area of ten acres or less at any time.
- 15. "Surface mining" means mining conducted on the land surface including open pit, strip, or auger mining; dredging; quarrying; reworking abandoned dumps and tailing and activities related thereto.
- 16. "Toxic-forming materials" means earth materials or wastes which, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are detrimental to biota or uses of water.
- 17. "Waste" means (a) physical waste, (b) operations which cause or tend to cause unnecessary or excessive surface loss, or (c) operations that do not recover all of the mineral being mined that is technically and economically possible.

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-02. Scope of chapter. This chapter contains general rules of statewide application which have been adopted by the industrial commission to conserve the natural resources of North Dakota, to prevent waste, and to provide for operation in a manner as to protect correlative rights of all owners of subsurface minerals. Special rules and orders have been and will be issued when required and shall prevail as against general rules, regulations, and orders if in conflict therewith. However, wherever this chapter does not conflict with special rules heretofore or hereafter adopted, this chapter will apply in each case. The commission may grant exceptions to this chapter, after due notice and hearing, when such exceptions will result in the prevention of waste and operation in a manner to protect correlative rights.

History:

General Authority: NDCC 38-12-02 Law Implemented: NDCC 38-12-02 43-02-2.3-03. Uranium surface mining. Surface mining activities targeting uranium ore from noncoal source rock are regulated under this chapter. Surface mining activities targeting uranium ore from uraniferous lignite deposits are not subject to this section and shall be conducted in accordance with North Dakota Century Code chapter 38-14.1 and North Dakota Administrative Code title 69-05.2 and under the regulatory authority of the Public Service Commission.

History:

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-04. Radioactive material. The handling, storage, transportation, and disposal of radioactive material shall be in accordance with United States nuclear regulatory commission requirements and those of the state department of health as set forth in North Dakota Century Code chapters 23-20.1, 23-20.2, and 23-20.5 and in North Dakota Administrative Code titles 33-10, 22-24, and 23-25.

History:

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-05. Bond. Before any person receives a permit to explore for or produce subsurface minerals, the person shall submit to the commission and obtain its approval of a surety bond or cash bond. An alternate form of security may be approved by the commission after notice and hearing, as provided by law. The operator of a well or facility shall be the principal on the bond covering the well or facility. Each such surety bond shall be executed by a responsible surety company authorized to transact business in North Dakota.

1. Bond amounts for surface mining facilities. For surface mining facilities, the amount of the bond will be five thousand dollars per acre [.40 hectare]. The applicant may file either the entire bond for the permit term or an incremental bond schedule and bond required for the first scheduled increment. Increments must be of sufficient size and configuration to provide for efficient reclamation operations.

When the operator elects to increment the amount of the bond, the operator shall:

- <u>a.</u> Furnish a legal description of each incremental area.
- <u>b.</u> Furnish a schedule when each increment will require bond.
- <u>c.</u> Furnish the estimated costs for the commission to complete the reclamation plan for the initial increment.

- <u>d.</u> Provide the estimated cost to complete the reclamation plan for the next increment at least ninety days prior to the expected starting date of mining.
- 2. Bond terms. Bonds shall be conditioned upon full compliance with North Dakota Century Code chapter 38-12, and all administrative rules and orders of the commission, and continues until any of the following occurs:
 - a. The testholes or wells have been satisfactorily plugged which shall include practical reclamation of the well site and appurtenances thereto, and all logs, plugging records, and other pertinent data required by statute or rules and orders of the commission are filed and approved.
 - <u>b.</u> The mined lands or lands disturbed by any method of exploration or production of subsurface minerals have been restored and approved by the director.
 - c. The liability on the bond has been transferred to another bond and such transfer approved by the commission.
- 3. Transfer of property under bond. Transfer of property does not release the bond. In case of transfer of property or other interest in a well, extraction facility, or surface mining facility, such as producers not ready for plugging, and the principal desires to be released from the bond covering the well or facility, the principal must proceed as follows:
 - a. The principal must notify the director in writing of all proposed transfers of property at least thirty days before the closing date of the transfer. The director may, for good cause, waive this requirement.

The principal shall submit to the commission a form 15-sm reciting that a certain property, or properties, describing each by quarter-quarter, section, township, and range, is to be transferred for the purpose of ownership or operation to a certain transferee, naming such transferee. The date of assignment or transfer must be stated and the form signed by a party duly authorized to sign on behalf of the principal.

On said transfer form the transferee shall recite the following: "The transferee has read the foregoing statement and accepts such transfer and the responsibility of such property under the transferee's one-well bond, surface mining facility bond, or extraction facility bond". Such acceptance must be signed by a party authorized to sign on behalf of the transferee and the transferee's surety.

b. When the commission has approved the transfer and acceptance and accepted it under the transferee's bond, the transferor shall be released from the responsibility of well plugging and site reclamation. If such wells include all the wells within the responsibility of the transferor's bond, such bond will be released by the commission upon written request. Such request must be signed by an

- officer of the transferor or a person authorized to sign for the transferor. The director may refuse to transfer any well from a bond if the well is in violation of a statute, rule, or order.
- c. The transferee (new operator) of any extraction facility, surface mining facility, or injection well shall be responsible for the plugging and site reclamation of any such property. For that purpose, the transferee shall submit a new bond or, in the case of a surety bond, produce the written consent of the surety of the original or prior bond that the latter's responsibility shall continue and attach to such well. The original or prior bond shall not be released as to the plugging and reclamation responsibility of any such transferor until the transferee submits to the commission an acceptable bond to cover such well. All liability on bonds shall continue until the plugging and site reclamation of such property is completed and approved.
- 4. Bond Termination. The commission shall, in writing, advise the principal and any sureties on any bond as to whether the plugging and reclamation is approved. If approved, liability under such bond may be formally terminated upon receipt of a written request by the principal. The request must be signed by an officer of the principal or a person authorized to sign for the principal.
- 5. <u>Director's authority.</u> The director is vested with the power to act for the commission as to all matters within this section, except requests for alternative forms of security, which may only be approved by the commission.
- 6. The director shall periodically review the amount of bond. The director may require adjustments to the amount of bond to reflect inflationary increases or increases in the anticipated costs of reclamation.

The commission may refuse to accept a bond if the operator or surety company has failed in the past to comply with statutes, rules, or orders relating to the operation of wells; a civil or administrative action brought by the commission is pending against the operator or surety company; or for other good cause.

History:

General Authority: <u>NDCC 38-12-02</u> **Law Implemented:** NDCC 38-12-02

43-02-02.3-06. Designation and responsibilities of operator. The principal on the bond covering a surface mining facility is the operator of the mine. The operator is responsible for compliance with all laws relating to the mine site. A dispute over designation of the operator of a well may be addressed by the commission. In doing so, the factors the commission may consider include those set forth in subsection 1 of section 43-02-02.3-21.

History:

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-07. Permit required. A permit is required prior to commencement of mining.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-08. Submission of permit application. Any person who conducts or expects to conduct mining operations shall file with the department a complete permit application and all required materials. The applicant shall file with the department proof that it submitted a copy of the application to the county recorder in the county in which the proposed permit area is located.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-09. Summary document. The permit application must contain a summary document that describes the main elements of the operation and identifies the major environmental issues involved.

History:

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-10. Small mining operation permit requirements. Permit applications for small, non-coal, surface and subsurface mining operations shall address the following:

- 1. Identification of interests to include:
 - <u>a.</u> The name and address of the operator responsible for the mining operations and reclamation of the site.
 - <u>b.</u> The name and address of the surface landowners and mineral owners of all land to be affected by the mining operation.
 - <u>c.</u> The mine name and the mine safety and health administration identification number.

- d. Documents evidencing the operator's right to enter the proposed permit area and conduct mining and reclamation, including a showing that the surface owner will be compensated for loss of agricultural production.
- 2. Project location description and maps plotted at a scale to accurately identify locational landmarks and operational details, to include:
 - a. A legal description of the proposed permit area.
 - b. The general location as shown on a topographic map which gives the location of the following: perennial, intermittent and ephemeral streams; springs and seeps; wetlands, riparian areas, lakes and other water bodies; residences, businesses and other structures; existing and proposed roads; other access routes; support facilities, cemeteries; burial grounds; cultural resources listed on the National Register of Historic Places; electrical transmission and communication lines; pipelines; and oil, gas and water wells on and within a half mile of the permit area.
 - c. An operations map which identifies:
 - (1) The area to be disturbed;
 - (2) The location of any existing or proposed operations including access roads, drill holes, trenches, pits, cuts, or other planned small mining activities; and
 - (3) Any previous adjacent disturbance for with the operator is not responsible.
- 3. Operation plan. A brief narrative description of the proposed mining operation. The description must include the following information:
 - <u>A general description of the minerals sought, the methods of extraction, and any processing to be conducted on site.</u> Any chemicals to be used on site must be identified.
 - b. An estimate of depth to groundwater and total dissolved solids concentration.
 - <u>c.</u> Estimated width and length of any new roads to be constructed.
 - <u>d.</u> An estimate of the total number of surface acres to be disturbed by the mining operation.
 - e. A discussion of plans for saving and replacing topsoil and subsoil from the areas to be affected.

- f. The amount of material (including mineral deposit, overburden, waste rock, or core hole material) to be extracted, moved, or proposed to be moved, relating to the mining operation.
- g. The locations proposed to be used for stockpiling topsoil, subsoil, overburden, and any other materials, including the mineral to be mined.
- h. A description of the plans for any structures that will be used for managing runoff from the disturbed areas and a discussion of other sediment control measures that will be used.
- 4. Reclamation plan. A reclamation plan must be submitted with the permit application to provide a general description of how the land surface of permit area will be restored as nearly as possible to its original condition following closure. This must include a post-mine topographic map or post-mine cross-sections showing how the disturbed area will conform to the adjacent undisturbed lands. The reclamation plan must discuss the post-mining land uses for the disturbed lands and include plans for replacing any pre-mine water supplies that are adversely affected by mining operations. A detailed reclamation plan may be submitted at the time of application or as a permit modification to the general reclamation plan prior to commencing reclamation operations.

General Authority: NDCC 38-12-03 Law Implemented: NDCC 38-12-03

43-02-02.3-11. Large mining operation permit requirements. In addition to informational requirements set forth in subsections 1 through 3 of 43-02-02.3-10, permit applications for large, non-coal, surface and subsurface mining operations and extraction facilities shall address the following:

- 1. <u>Identification of interests.</u> <u>In addition to the information requirements set forth in subsection 1 of 43-02-02.3-10, the applicant will provide the following information:</u>
 - a. A listing of all parties, including addresses, which have an ownership and controlling interest in the operation. Alternatively, the applicant may submit the applicant's most recent 10k form required by the United States Securities and Exchange Commission.
 - b. A statement of all current or previous mining operations within the United States held during the five years prior to application owned, operated, or controlled by any person identified in subdivision a of subsection 1 and the names and addresses of regulatory agencies with jurisdiction over the environmental aspects of those operations that could provide a compliance history for the operations.

- c. The name and address of a designated agent for the service of notices and orders from the director.
- <u>d.</u> A listing of all federal and state permits required for the operation.
- 2. A surface facilities map which identifies the locations of: buildings; stationary mining/processing equipment; roads; underground utilities; power lines; proposed drainage control structures; the location of topsoil and subsoil storage areas; tailings or processed waste facilities; disposal areas for overburden; solid and liquid wastes and wastewater discharge treatment and containment facilities.
- 3. Sampling and Analysis Plan.
 - a. The applicant shall submit four copies of a proposed sampling and analysis plan (SAP) to the director for review prior to baseline data collection. The proposed SAP should contain, at a minimum, the following information for each relevant resource:
 - (1) sampling objectives;
 - (2) a list of the data to be collected;
 - (3) methods of collection;
 - (4) General water chemistry and the parameters to be analyzed for;
 - (5) maps indicating the proposed sampling locations;
 - (6) sampling frequency; and
 - (7) laboratory and field quality assurance plans.
 - b. The director shall distribute the proposed SAP to other agencies as determined by the director. The agencies will have 30 days from receipt of the proposed SAP to submit written comments to the director. Any written comments received within 30 days shall be provided to the applicant. The director shall also provide written comments and recommendations to the applicant on the adequacy of the SAP.
 - c. The applicant may request a conference with the director to discuss the SAP.
- 4. Baseline data. Descriptions, maps, drawings, or photographs shall be included as required for determination of existing conditions, operations, reclamation and postmining use. Baseline data shall include, as applicable:
 - a. A description of the climatological factors representative of the permit area including precipitation, prevailing winds and temperature.

- b. A description of the thickness and nature of the topsoil and subsoil within the proposed permit area. A soil survey and soil analyses conducted in accordance with standard methods acceptable to the director will be required to show variations in topsoil and subsoil depth and suitability. If a published soil survey is not available, a new survey must be prepared by a soil classifier as defined by North Dakota Century Code 43-36-01.
- c. A map which delineates existing vegetation types and a description, including cover, density, and productivity of the plant communities within the proposed permit area. Included in this description shall be the results of an inventory conducted for any sensitive, threatened or endangered plant species within the permit area.
- <u>Wildlife information shall be obtained for the permit area and adjacent area.</u>
 <u>Where species may be impacted beyond these areas, the information shall include, to the extent practicable, the area of potential impact.</u>
- e. A description of the ore body in the proposed permit area, including geologic plans and cross-sections depicting the nature and depth of overburden, mineralized zone or ore body, aquifers and springs. A description of the potential for geochemical alteration of overburden, ore body and other materials present within the permit area. Detailed analyses may be required if the substrata is suspected to contain substances that are likely to create acid drainage or might degrade surface water or groundwater or hinder reclamation.
- f. Surface and groundwater information including:
 - (1) A map indicating the location of surface waters and the location and size of watersheds in and adjacent to the proposed permit area. The map shall depict all watercourses, lakes, natural and artificial water bodies, springs, and riparian and wetland areas. Streams shall be classified as ephemeral, intermittent or perennial. The map shall identify all watercourses, lakes, springs, and riparian and wetland areas into which surface or pit drainage will be discharged or may possibly be expected to reach;
 - (2) A description of surface drainage systems sufficient to identify the seasonal variation in surface water quantity and quality within the proposed permit and affected areas to the extent possible;
 - (3) <u>Lithology and thickness of each geologic unit below the site indicating which units are water bearing, cross sections and potentiometric maps indicating the locations of wells and the groundwater flow direction in the vicinity of the site, and references or sources for this information;</u>

- (4) A description of the aquifer characteristics including total dissolved solids concentration, maximum and minimum depths to groundwater, direction of flow and gradients, transmissivity and storativity, and a general description of groundwater quality, and references or sources for this information; and
- (5) The location of all water wells and developed springs within and extending at least one mile from the proposed permit area. Water quality and quantity information for each well and spring shall be provided in the format required by the director.
- g. A description and delineation on topographic maps of any prior mining operations which may have affected the permit area including, if known, the type of mining and processing method and a list of any processing chemicals or reagents used.
- h. A list and accompanying map indicating all sites on or eligible for listing on the National Register of Historic Places and known cemeteries and human burials within the proposed permit area. Included with this list and map shall be a description of the effects the proposed mining operations may have on these sites and any proposed mitigation measures.
- i. A description of the present and historic land use of the permit area, the general patterns of land use in the surrounding areas, and a narrative of land capability and productivity based upon Natural Resource Conservation Service land use, capability classes or a similar classification.
- 5. Operation plan. In addition to the information requested in subsection 3 of 43-02-02.3-10, applicant will provide the following information as applicable:
 - a. The identification of any toxic-forming or acid-forming materials present or to be left on the site as a result of mining or mineral processing.
 - b. In addition to the estimated total acreages proposed to be disturbed, provide an estimate of acreage to be either disturbed or reclaimed annually during the permit term.
 - c. A description of the plan for saving, protecting and replacing the topsoil and subsoil.
 - <u>d.</u> Maps and plans indicating the location, size and capacities for the mine facilities including:
 - (1) Leach pads, heaps, ore dumps and stockpiles;
 - (2) Impoundments;
 - (3) Ponds;

- (4) Diversions;
- (5) Disposal systems;
- (6) Pits;
- (7) Tailings disposal facilities;
- (8) Mills;
- (9) Water treatment facilities;
- (10) Storage areas for equipment, vehicles, fuel, chemicals and solutions;
- (11) Topsoil and subsoil stockpiles;
- (12) Waste rock dumps; and
- (13) Other facilities or structures.
- e. A contingency plan to mitigate impacts to wildlife when there has been an emergency or accidental discharge of toxic substances that may impact wildlife.
- f. A description of measures which will be undertaken to control sedimentation from the permit area and a plan for the monitoring of non-point source sediment pollution from the disturbed area.
- 6. Impact Assessment: The operator shall provide a general narrative description identifying potential surface and subsurface impacts. This description will include, at a minimum:
 - a. Projected impacts to surface and groundwater systems;
 - <u>b.</u> <u>Potential impacts to state and federal threatened and endangered species or their critical habitats;</u>
 - c. Projected impacts of the mining operation on existing soil resources;
 - d. Projected impacts of mining operations on slope stability, erosion control, air quality, and public health and safety; and
 - e. Actions which are proposed to mitigate any of the above referenced impacts.

- 7. Reclamation Plan. Each application shall include a reclamation plan, including maps or drawings as necessary, consisting of a narrative description of the proposed reclamation including:
 - a. A statement of the current land use and the proposed post-mining land use for the disturbed area, including a written preference statement from the surface owner for the proposed post-mine land use.
 - b. A map at an appropriate scale and an approximate schedule indicating the
 reclamation activities to take place on disturbed areas of the mine site including
 the number of acres to be reclaimed. The operator will be required to follow the
 sequence described unless modified or revised.
 - c. A description of the manner and the extent to which roads, highwalls, slopes, impoundments, drainages, pits and ponds, piles, drill holes, and similar structures will be reclaimed to the approximate original contour.
 - d. A detailed description of any surface facilities to be left as part of the post-mining land use, including buildings, utilities, roads, pads, ponds, pits and surface equipment where the post-mine land use has been zoned as industrial or commercial land by the county.
 - e. A description of the treatment, location and disposition of any toxic-forming or acid-forming materials generated and left on site, including a map showing the location of such materials upon the completion of reclamation.
 - f. Plans for replacing the topsoil and subsoil that is removed and saved.
 - g. A planting program as best calculated to revegetate the disturbed area.
 - (1) Plans shall include, at a minimum, soil stabilization procedures, seed bed preparation, seed mixtures and rates, and timing of seeding.
 - (2) Where there is no original protective vegetative cover, an alternative practical procedure must be proposed to minimize or control erosion or siltation.
 - h. A topographic map of the anticipated surface configuration of the permit area upon completion of reclamation operations. The map shall be at appropriate contour intervals and scale.
 - <u>i.</u> A statement that the operator will conduct reclamation as required by these rules.

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-12. Review for completeness. The department will determine whether the application is complete. The department will notify the applicant in writing, within thirty days after the application is submitted, whether the application is complete or specify deficiencies that must be corrected in order to complete the application. If the application is substantially deficient, it will be rejected. The department will notify the applicant when the application is considered complete.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-13. Review period.

- 1. The department will have one hundred eighty days after the filing date to approve or disapprove the application.
- 2. The department may extend the review period not to exceed an additional one hundred eight days if:
 - a. Additional time is needed to correct application deficiencies.
 - b. Significant changes are submitted that in the department's judgment require additional time to review. The department may require additional public notification of the amended application.
 - <u>c.</u> The department requires additional time to conduct an informal conference or a formal hearing or complete the decision.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-14. Permit application fees.

- 1. A fee of one hundred dollars must accompany the application for a small mining facility permit.
- 2. A fee of five hundred dollars plus ten dollars per acre must accompany the application for a large mining facility permit.

History:

General Authority: NDCC 38-12-03

Law Implemented: NDCC 38-12-03

43-02-02.3-15. Information added after filing date. Additional information submitted to the department by the applicant to supplement, correct, amend, or clarify an application following the filing date must also be submitted with the county recorder in the county or counties in which the proposed permit area is located. The additional information must be submitted at least thirty days before the hearing date. The applicant must transmit proof of submission with the county recorder to the department. The department shall give notice to the public of the additional information at least fifteen days before the scheduled hearing date.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-16. Notice to agencies. Within the first ten days of the review period of a permit application, the department shall send copies of the application to the department of agriculture, the state department of health, and to the water commission.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-17. Notice of hearing. Except in the case of an emergency, the commission will give thirty days' notice to the general public of the time and place of the hearing on the application by one publication in a newspaper of general circulation in the state capital and in a newspaper of general circulation in the country where the land affected, or some part, is situated. Immediately upon receiving notice of the hearing date, the permit applicant shall give notice by certified mail to surface and subsurface owners within the permit application area and to the county recorder in the county or counties in which the proposed permit area is located.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-18. Permit approval or denial. Within ninety days of the hearing, or a reasonable time thereafter, the department will notify the applicant of the commission's decision as to whether the permit is approved or denied.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-19. Permit term.

- 1. The permit will remain in effect as long as active mining continues at a mine site and the operator remains in full compliance with all permit conditions.
- 2. A permit shall be reviewed and may be required to be modified or revised for any of the following:
 - a. Additional applicable requirements under North Dakota Century Code chapters
 38-12 and 38-12.1 and North Dakota Administrative Code article 43-02; or
 - b. The director determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms or conditions of the permit.
- 3. If the permit area contains property owned by the federal or state government, the expiration or termination of the government's authorization for the operator to conduct mining operations on the property automatically suspends the operator's authority to continue mining operations on the property, although not necessarily reclamation operations, by the permit issued under chapter 43-02-02.3.

History:

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-20. Permit modifications or revision. An application for a permit modification or revision shall be in a format acceptable to the director and shall be accompanied by sufficient information for the director to determine whether any of the factors listed in this section are present. A permit modification or revision will not be granted unless the director determines that the proposed modification or revision meets the requirements of this rule.

- 1. A permit modification or revision for a mining operation is required for:
 - <u>a.</u> Each new discrete processing, leaching, excavation, storage or stockpile unit located within the permit area and not identified in the permit;
 - <u>b.</u> Each expansion of such a unit identified in the permit that exceeds the design limits specified in the permit; and
 - c. Any change in the approved reclamation plan.
- 2. The operator may request additional acreage [hectarage] if the department considers the addition an incidental boundary change to the original permit area.

- 3. The operator may file an application to withdraw any lands previously approved as a part of a permit area, except lands on which operations have commenced. The operator shall demonstrate and certify that the proposed acreage [hectarage] to be deleted has not been affected by mining activities. Applications to delete undisturbed acreage [hectarage] are not subject to the public notice, procedural, and approval or denial standards of North Dakota Century Code chapter 38-12.
- 4. Revisions are modifications that require public notice and an opportunity for public hearing pursuant to this rule. The director shall review each request for a permit modification to determine whether it must be processed as a revision.
 - a. The director shall consider the following factors and their level of impact to determine whether a permit modification would have a significant environmental impact requiring a revision:
 - (1) Whether the proposed change would authorize an expansion of design limits beyond that currently authorized by the permit that:
 - (a) Would be located in or is expected to have a direct surface impact on wetlands, springs, perennial or intermittent streams, lakes, rivers, other water bodies or riparian areas.
 - (b) Is expected to have a direct impact on ground water that has a total dissolved solids concentration of less than 10,000 mg/l.
 - (c) <u>Is expected to result in point or non-point source surface or subsurface releases of acid or other toxic substances from the permit area.</u>
 - (d) Would be located in designated critical habitat areas as determined in accordance with the federal Endangered Species Act of 1973 or in areas determined by the Game and Fish Department likely to result in an adverse impact on an endangered species.
 - (e) Would adversely impact archeological and historical areas.
 - (f) Would be located in a known cemetery or other burial ground.
 - (g) Would be located in an area designated as a Federal Wilderness Area,
 Wilderness Study Area, Area of Critical Environmental Concern, or an
 area within the national Wild and Scenic River System.
 - (2) Whether the proposed change would result in a significant increase in the required amount of financial assurance as determined by the director; or

- (3) Whether the proposed change would significantly depart from the nature or scale of the permit.
- b. An application for a permit modification or revision shall be accompanied by sufficient information for the director to determine whether any of the factors listed in this section are present.
- <u>5.</u> The following actions do not require permit modifications or revisions:
 - a. The construction, relocation or modification of roads within the disturbed area that does not change the reclamation plan;
 - b. Placement or movement of support buildings, equipment areas, maintenance shops, monitoring facilities, wells, power lines, power poles, substations, and communications facilities within the disturbed area that does not change the reclamation plan; and
 - c. The movement of tanks, pipelines, utilities, and portable units.

General Authority: NDCC 38-12-03 **Law Implemented:** NDCC 38-12-03

43-02-02.3-21. Revocation and limitation of permits.

- 1. After notice and hearing, the commission may revoke a mining permit or limit its duration. The commission may act upon its own motion or upon the application of an owner in the permit area. In deciding whether to revoke or limit a permit, the factors that the commission may consider include:
 - a. The technical ability of the operator and other owners to conduct mining operations.
 - b. The experience of the operator and other owners in similar mining operations.
 - <u>c.</u> Contractual obligations such as an expiring lease.
 - d. The amount of ownership the operator and other owners hold in the lease. If the operator is the majority owner or if its interest when combined with that of its supporters is a majority of the ownership, it is presumed that the operator should retain the permit. This presumption, even if not rebutted, does not prohibit the commission from limiting the duration of the permit. However, if the amount of the interest owned by the owner seeking revocation or limitation and its supporters are a majority of the ownership, the commission will presume that the permit should be revoked.

- The commission may suspend a permit that is the subject of a revocation or limitation proceeding. A permit will not be suspended or revoked after operations have commenced.
- 3. If the commission revokes a permit upon the application of an owner and issues a permit to that owner or to another owner who supported revocation, the commission may limit the duration of such permit. The commission may also, if the parties fail to agree, order the owner acquiring the permit to pay reasonable costs incurred by the former operator and the conditions under which payment is to be made. The costs for which reimbursement may be ordered may include those involving survey of the well site, title search of surface and mineral title, and preparation of an opinion of mineral ownership.
- 4. If the commission declines to revoke a permit or limit the time within which it must be exercised, it may include a term in its order restricting the ability of the operator to renew the permit or to acquire another permit within the same spacing or drilling unit.

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-22. Operational practices. The operator shall conform to the following practices:

- 1. The mining and reclamation operation shall be designed and operated using the most appropriate technology and best management practices.
- 2. Public safety and welfare. The operator shall minimize hazards to the public safety and welfare during operations. Methods to minimize hazards shall include but not be limited to:
 - a. The proper disposal of trash, scrap metal and wood, and extraneous debris;
 - <u>b.</u> The plugging or capping of drill, core, or other exploratory holes pursuant to section 43-02-02-24;
 - c. The posting of appropriate warning signs in locations where public access to operations is readily available; and
 - <u>d.</u> The construction of berms, fences, or barriers above highwalls or other <u>excavations.</u>
- 3. <u>Drainages.</u> If natural channels are to be affected by the mining operation, then the operator shall take appropriate measures to avoid or minimize environmental damage.

- 4. Erosion control. Operations shall be conducted in a manner such that sediment from disturbed areas is adequately controlled. The degree of erosion control shall be appropriate for the site-specific and regional conditions of topography, soil, drainage, water quality or other characteristics.
- 5. Toxic-forming materials. All toxic-forming or potentially deleterious material shall be safely removed from the site or kept in an isolated condition such that adverse environmental effects are eliminated or controlled.
- 6. Soils. All available topsoil and subsoil shall be removed, stored and stabilized The salvaged topsoil and subsoil must be respread following the backfill and grading of disturbed areas.
- 7. Concurrent reclamation. During operations, disturbed areas shall be reclaimed as soon as practical when no longer needed, except to the extent necessary to preserve evidence of mineralization for proof of discovery. Areas which have been disturbed but are not routinely or currently utilized shall be kept in a safe, environmentally stable condition. All reclamation work through seeding must be completed within three years of completion of mining.

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-23. Performance and reclamation standards and requirements. The land surface of the permit area will be restored as nearly as possible to its original condition unless conflicting with the approved post-mining land use. Each reclamation plan must be developed to meet the site-specific characteristics of the mining operation and the site.

- 1. Most Appropriate Technology and Best Management Practices. The mining operation and the reclamation plan shall be designed and operated using the most appropriate technology and the best management practices.
- 2. Contemporaneous Reclamation. Contemporaneous reclamation is required to the maximum extent practicable and in a manner that is consistent with the approved reclamation plan. All reclamation work must be completed within three years of completion of mining.
- 3. Assure Protection. The mining operation and completed reclamation shall meet the following requirements established to assure protection of human health and safety, the environment, wildlife and domestic animals.

- a. Signs, Markers and Safeguarding. Measures will be taken to safeguard the public to prevent falls from highwalls or pit edges. Depending on site-specific characteristics, the following measures shall be required:
 - (1) Posting warning signs in locations near hazardous areas;
 - (2) Restricting access to hazardous areas;
 - (3) Marking the permit area boundaries;
 - (4) Posting a sign at the main entrances giving a telephone number of a person to call in the event of emergencies related to the mine; or
 - (5) Other measures as needed to protect human safety.
- b. Wildlife Protection. Measures shall be taken to minimize adverse impacts on wildlife and important habitat. Based on site-specific characteristics, the following measures will be required:
 - (1) Restricting access of wildlife and domestic animals to toxic chemicals or otherwise harmful materials;
 - (2) Minimizing harm to wildlife habitat during mining; and
 - (3) Reclaiming areas of wildlife habitat if not in conflict with the approved post-mining land use.
- c. Cultural Resources. Cultural resources listed on or eligible for listing on the

 National Register of Historic Places, and any cemeteries or burial grounds shall
 be protected until clearance has been granted by the appropriate authority.
- d. Hydrologic Balance. Operations shall be planned and conducted to minimize change to the hydrologic balance in both the permit and potentially affected areas. If not in conflict with the approved post-mining land use, reclamation shall result in a hydrologic balance similar to pre-mining conditions unless non-mining impacts have substantially changed the hydrologic balance.
 - (1) Operations shall be designed so that non-point source surface releases of acid or other toxic substances shall be contained within the permit area, and that all other surface flows from the disturbed area are treated to meet all applicable state and federal regulations.
 - (2) The disturbed areas shall not contribute suspended solids above background levels, or where applicable the health department standards, to ephemeral, intermittent and perennial streams.

- (3) To provide data to determine background levels for surface water entering the permit area, appropriate monitoring shall be conducted on drainages leading into the permit area.
- (4) All diversions of overland flow shall be designed, constructed and maintained to minimize adverse impacts to the hydrologic balance and to assure the safety of the public.
 - (a) No diversion shall be located so as to increase the potential for landslides.
 - (b) Unless site-specific characteristics require a different standard which is included in the approved permit, diversions which have watersheds larger than ten acres shall be designed, constructed and maintained to safely pass the peak runoff from a ten year, twenty-four hour precipitation event.
 - (c) All diversion designs which have watersheds larger than ten acres shall be included in the permit application and certified by a registered professional engineer. Diversion designs shall be kept on-site or otherwise be made available, upon request, to the director for inspection.
 - (d) When no longer needed, temporary diversions shall be removed and the disturbed area reclaimed.
- <u>e.</u> <u>Stream Diversions. When streams are to be diverted, the stream channel diversion</u> shall be designed, constructed, and removed in accordance with the following:
 - (1) Unless site-specific characteristics require different measures to meet the performance standard and are included in the approved permit, the combination of channel, bank and flood plain configurations shall be adequate to safely pass the peak run-off of a ten year, twenty four precipitation event for temporary diversions, a hundred year, twenty four hour precipitation event for permanent diversions;
 - (2) The design and construction of all intermittent and perennial stream channel diversions shall be certified by a registered professional engineer. As-built drawings shall be completed promptly after construction and be included in the permit application and retained on site or otherwise made available upon request to the director; and
 - (3) When no longer needed, temporary stream channel diversions shall be removed and the disturbed area reclaimed.

- <u>f.</u> Impoundments. If impoundments are required they shall be designed, constructed and maintained to minimize adverse impacts to the hydrologic balance and adjoining property and to assure the safety of the public.
 - (1) Unless site-specific characteristics require different measures to meet the performance standard and are included in the approved permit, impoundments having earthen embankments but not subject to the jurisdiction of the Mine Safety and Health Administration or the state department of health shall:
 - (a) Have a minimum elevation at the top of the settled embankment of two feet above the water surface in the pond with the spillway flowing at the design depth;
 - (b) Have a top width of the embankment not less than six feet;
 - (c) Have combined upstream and downstream side slopes of the settled embankment not less than five horizontal: one vertical with neither slope steeper than two horizontal: one vertical. Slopes shall be vegetated or otherwise stabilized to control erosion;
 - (d) Have the embankment foundation cleared of all vegetative matter, all surfaces sloped to no steeper than one horizontal: one vertical and the entire foundation area scarified;
 - (e) Have fill material free of vegetative matter and frozen soil;
 - (f) Have suffient capacity for sediment storage and have sediment removed when that capacity is reached; and
 - (g) Have spillways provided to safely discharge the peak runoff of a twenty-five year, twenty-four hour precipitation event, or an event with a ninety percent chance of not being exceeded for the design life of the structure; or
 - (h) Have other site-specific design criteria for embankments as long as they result in a minimum static safety factor of 1.3 with water impounded to the design level;
 - (i) Be designed and certified by a registered professional engineer. As-built drawings shall be completed promptly after construction and be retained on site or otherwise made available upon request to the director; and
 - (j) If necessary for sediment control, be in place before any other disturbance to the watershed for the impoundment.

- (2) When no longer required, impoundments shall be graded to achieve positive drainage unless:
 - (a) The surface estate owner has requested in writing that they be retained;
 - (b) They are consistent with the approved reclamation plan; and
 - (c) They are appropriate for the post-mining land use or the self-sustaining ecosystem.
- g. <u>Minimization of Mass Movement. All temporary stockpiles shall be constructed</u> and maintained to minimize mass movement.
- h. Riparian and Wetland Areas. Disturbance to riparian and wetland areas shall be minimized during mining. Adverse effects to riparian and wetland areas shall be mitigated during reclamation unless the mitigation conflicts with the approved post-mining land use.
- <u>i.</u> Roads. Roads shall be constructed and maintained to control erosion.
 - (1) Drainage control structures shall be used as necessary to control runoff and to minimize erosion, sedimentation and flooding. Culverts or other drainage facilities shall be installed as road construction progresses and shall be capable of safely passing a ten year, twenty-four hour precipitation event unless site-specific characteristics indicate a different standard is appropriate and is included in the approved permit. Culverts and drainage pipes shall be constructed and maintained to avoid plugging, collapsing, or erosion.
 - (2) Roads to be constructed in or across intermittent or perennial streams require site-specific designs to be submitted with the permit application.
 - (3) Permanent roads must be approved by the surface owner and be consistent with the approved post-mining land use.
- j. Explosives. Blasting shall be conducted to prevent injury to persons or damage to property not owned by the operator. Fly rock shall be confined to the permit area.
 The director may require a detailed blasting plan, pre-blast surveys or specify blast design limits to control possible adverse effects to structures.
- 4. Reclamation of surface facilities. The permit area shall be stabilized, to the extent practicable, to minimize future impact to the environment and protect air and water resources. Unless otherwise approved by the department, the reclamation of surface facilities shall include the removal of all buildings, roads, and structures, and the surface restored as nearly as possible to its original condition. Tailings

impoundments and ponds must be reclaimed and filled in and respread with topsoil and subsoil. All grading, backfilling, and topographic reconstruction must control erosion and sedimentation, protect areas outside the affected land from slides or other damage, and minimize the need for long-term maintenance.

Measures must be taken to reduce, to the extent practicable, the formation of acid and other toxic drainage that may otherwise occur following closure to prevent releases that cause federal or state standards to be exceeded. Nonpoint source

surface releases for acid or other toxic substances shall be contained within the permit area.

Pond and impoundment reclamation must meet the following requirements:

- a. Pond sludges must be chemically characterized to determine whether further treatment is necessary before disposal. Sludges must be removed for disposal at on offsite permitted solid waste facility or buried and covered onsite in a solid waste facility permitted in accordance with the applicable solid waste rules in North Dakota Administrative Code article 33-20; and
- b. Geomembranes must be removed from impoundments, unless it is demonstrated to the department's satisfaction that they will serve a useful function consistent with the approved postmining land use. The geomembrane material must be disposed of in a permitted landfill or may be disposed of onsite only if the operator first secures a solid waste permit in compliance with North Dakota Administrative Code article 33-20.
- 5. Topsoil and subsoil. The operator shall take measures to remove and save all available topsoil and subsoil and protect it from erosion or contamination and assure that it is in a usable condition for sustaining vegetation when needed. The following requirements shall be met unless site-specific characteristics mandate different requirements and those requirements are included in the approved permit.
 - <u>a.</u> Topsoil and subsoil shall be sampled and analyzed for vegetation establishment suitability:
 - (1) Sample spacing and interval shall be based on-site specific materials; and
 - (2) Suitability will be identified by analysis based on-site specific materials.
 - <u>b.</u> Revegetation must be a component of the reclamation plan and all available topsoil and subsoil must be salvaged and replaced on disturbed areas.
 - <u>c.</u> Where direct distribution of topsoil or subsoil is not possible, it shall be stockpiled separately and in a manner to prevent loss of the resource.

- <u>d.</u> Topsoil and subsoil shall be distributed in a manner to establish and maintain vegetation, consistent with the approved permit.
- e. After distribution, topsoiled and subsoiled areas shall be stabilized to protect loss of the resource.
- <u>f.</u> Where topsoil has been stockpiled for more than one year, the operator may be required to conduct analyses to determine if amendments are necessary.
- 6. Erosion Control. Reclamation of disturbed lands must result in a condition that minimizes erosion. Revegetated lands must not contribute suspended solids above background levels, or where applicable the health department's standards, to streamflow of intermittent and perennial streams. Acceptable practices to control erosion include the following:
 - a. Stabilizing disturbed areas through land shaping, berming, or grading to final contour;
 - b. Minimizing reconstructed slope lengths and gradients;
 - c. Diverting runoff;
 - d. Establishing vegetation;
 - e. Regulating channel velocity of water;
 - <u>f.</u> <u>Lining drainage channels with rock, vegetation or other geotechnical materials;</u> and
 - g. Mulching.
- 7. Revegetation. Revegetated lands must meet the following standards:
 - a. Revegetation success for a return as near as possible to original condition shall be determined through comparison of ground cover, productivity and diversity and shall be made on the basis of the following approved reference areas.
 - (1) Foliage or basal cover and productivity of living perennial plants of the revegetated area shall be established equal to ninety percent of the reference area or equal to the approved revegetation standard using scientifically valid sampling techniques;
 - (2) Diversity of plant life forms (woody plants, grasses, forbs) shall consider what is reasonable based on the physical environment of the reclaimed area; and

- (3) Woody plant species shall be established to the approved density standard.
- <u>b.</u> For areas for which the approved post-mining land use is for wildlife habitat or forest land, success of vegetation shall be determined on the basis of tree or shrub stocking (density) and ground cover.
 - (1) The ground cover of living perennial plants shall be equal to ninety percent of the native ground cover of the reference area or the approved standard and shall be adequate to minimize erosion.
 - (2) Tree density for forest land shall have establishment rates of plant species equal to ninety percent of the approved reference area or other approved standard and shall be adequate to minimize erosion.
 - (3) If wildlife habitat is to be the post-mining land use, the operator shall select and use plant species on reclaimed areas based on the following criteria:
 - (a) Their proven nutritional value for fish and wildlife;
 - (b) Their uses as cover and security for wildlife;
 - (c) Their ability to support and enhance fish and wildlife habitat; and
 - (d) <u>Distribute plant life forms to maximize benefits of edge effect, cover</u> and other benefits for fish and wildlife.
- c. Revegetation for other post-mining land shall be consistent with the approved post-mining land use. Site-specific standards may include standards for foliar or basal cover, production and diversity and will be included in the approved permit.

General Authority: <u>NDCC 38-12-02</u> **Law Implemented:** <u>NDCC 38-12-02</u>

43-02-02.3-24. Report of production. The operator of a mine shall, on or before the tenth day of the second month succeeding the month in which production occurs, file with the director the amount of production made by the mine upon form 5-sm or approved computer sheets no larger than eight and one-half by eleven inches [21.59 by 27.94 centimeters]. The report shall be signed by both the person responsible for the report and the person witnessing the signature. The printed name and title of both the person signing the report and the person witnessing the signature shall be included.

Production data submitted to the director shall be kept confidential for a period of one year when so requested by the operator. Such period may be further extended upon approval by the commission.

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-25. Annual report. Every operator shall, on or before April 30 of each year after a permit has been issued, submit, on a form provided by the director, a report for the preceding calendar year. The report must:

- 1. Provide the status of the operation;
- 2. Provide production figures for the operation;
- 3. <u>Identify</u>, on a separate map, the location of the disturbed areas and if reclaimed, the year in which the work was done;
- 4. <u>Identify the number of acres disturbed, the number of acres reclaimed during the reporting year and the number of acres which have not yet been reclaimed;</u>
- 5. Indicate the current market value of any collateral posted as financial assurance in accordance with 43-02-02.3-05; and
- <u>6.</u> Indicate the compliance status for all existing state and federal environmental permits held by operator for this operation.

History:

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02

43-02-02.3-26. Additional information may be required. This chapter shall not be taken or construed to limit or restrict the authority of the commission to require the furnishing of such additional reports, data, or other information relative to production or products as may appear to be necessary or desirable, either generally or specifically, for the prevention of waste, protection of correlative rights, and the conservation of natural resources.

History:

General Authority: NDCC 38-12-02 **Law Implemented:** NDCC 38-12-02